

APPENDIX C

Biological Resources

Appendix C contains two tables and correspondence with USFWS and NMFS. The USFWS correspondence contains an area species list. Table C-1 describes habitats from field surveys conducted from O'Banion

Substation to Tracy Substation. Table C-2 is a list of Federally-listed endangered, threatened, proposed, and candidate species, which may be present in the study area.

Table C-1. Habitats Observed Along the Existing Right-of-Way from O'Banion Substation to Tracy Substation

Survey Reach	Starting Point (north)		Ending Point (south)		Habitat Type and Description
	Road Crossing or Other Descriptive Point	Segment/ MP mile/MP 0.1 mile ¹	Road Crossing or Other Descriptive Point	Segment/ MP mile/MP 0.1 mile ¹	
1	O'Banion Substation	A/0/1	Gilsizer Slough	A/1/5	Cropland—Ricefields with associated irrigation ditches and some scattered wetlands. This irrigation ditch contains some dense vegetation along its banks and may provide suitable giant garter snake habitat. In addition, there is a large slough just west of the ROW.
2	Gilsizer Slough north bank	A/1/5	Gilsizer Slough south bank	A/2/1	Freshwater emergent wetland
3	Gilsizer Slough south bank	A/2/1		A/6/4	Cropland—Ricefields
4		A/6/4	Where ROW turns east away from levee	A/8/4	Cropland—Ricefields, also the irrigation ditch that parallels the ROW becomes relatively barren
5	Where ROW turns east away from levee	A/8/4	North bank levee of Feather River Tower 146/1	A/11/0	Cropland
6	North Bank levee of Feather River	Structure 146/1 approx. A/10/4	South Bank levee of Feather River to the levee	A/11/4	Riparian, riverine, cropland—Riparian habitat on both sides of the river. Tower 146/4 is located within the floodplain in between levees. Cropland north and south of riparian corridor.
7	South Bank levee	A/11/4	Lee Rd-Tower 148/1	A/12/4	Cropland
8	Lee Rd	Structure 148/1 approx. A/12/4	Powerline Road	A/13/3	Cropland, riparian, riverine—Predominantly cropland. Small amount of riparian habitat where the ROW crosses Coon Creek.
9	Powerline Road	A/13/3	Pleasant Grove Slough/Creek	A/17/3	Cropland
10	Area immediately surrounding Pleasant Grove Slough/Creek	A/17/3	Approximately Howsley Road	153/2 approx. A/18/1	Wetland, Riparian, and riverine—Floodplain
11	Approximately Howsley Road Tower 153/2.	A/18/1	Proposed divergence point for Alternative 2 Tower 157/4 approx.	A/22/3	Urban, grassland, and cropland—cemetery, residential, ricefield, and a small irrigation ditch.

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	Road Crossing or Other Descriptive Point	Segment/ MP mile/MP 0.1 mile ¹	Road Crossing or Other Descriptive Point	Segment/ MP mile/MP 0.1 mile ¹	
12	Proposed divergence point for Alternative 2. Tower 157/4.	A/22/3	Baseline Road Tower 159/3	B/2/0	Grassland
13	Baseline Road Tower 159/3.	B/2/0	Rio Linda Road Tower 160/3.	B/2/4	Urban, grassland, and valley oak woodland—This area contains potential vernal pool habitat
14	Rio Linda Road Tower 160/3	B/2/4	Elverta switchyard	C/0/0	Grassland—Partially grazed
15	Elverta switchyard	C/0/0	Del Paso Road	C/4/2	Grassland
16	Del Paso Road	C/4/2	San Juan Road to American River Parkway	C/7/4	Urban
17	San Juan Road to American River Parkway	C/7/4	Tower 12/1	D/0/3	Riparian, floodplain with elderberry shrubs (evidence of valley elderberry longhorn beetle on some trees).
18	Near Santos Avenue Tower 12/1	D/0/3	North Levee at American River crossing	D/2/2	Urban
19	North Levee at American River crossing	D/2/2	South Levee at American River crossing	D/2/5	Urban, riparian, riverine—Contains an urban parkway and a very small riparian corridor
20	South Levee at American River crossing	D/2/5	Jackson Road Tower 15/2	D/3/2	Urban, grassland—The urban habitat is primarily industrial buildings devoid of vegetation
21	Jackson Road Tower 15/2	D/3/2	Florin Road Tower 19/1	D/7/4	Urban, grassland—Dump located immediately south of Jackson Road turning into annual grassland further south
22	Florin Road Tower 19/1	D/7/4	Gravel road Tower 20/5	D/9/4	Grassland, urban—Scattered housing located very close to ROW
23	Gravel road Tower 20/5	D/9/4	Road between Calvine and Gerber roads	D/10/0	Urban, potentially freshwater emergent wetland—Small wet depression located under ROW
24	Road between Calvine and Gerber roads	D/10/0	Tower 21/2	D/10/1	Urban—Residential park
25	Tower 21/2	D/10/1	Sheldon Road	D/10/7	Cropland—Currently tilled

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	Road Crossing or Other Descriptive Point	Segment/ MP mile/MP 0.1 mile ¹	Road Crossing or Other Descriptive Point	Segment/ MP mile/MP 0.1 mile ¹	
26	Sheldon Road	D/10/7	Bond Road	D/12/7	Grassland, riparian, riverine—At Bond Road, the ROW crosses Laguna Creek and its associated riparian corridor. This area looked to contain suitable red-legged frog habitat.
27	Bond Road	D/12/7	Route 99	E/1/4	Grassland, urban, potential lacustrine—Large graded housing development area with seasonal pond (currently empty). This area may also contain vernal pools, in particular between Calvine Road and Elk Grove Road.
28	Route 99	E/1/4	Eshlinger Road	E/1/5	Grassland, lacustrine—Stock pond located near tower 28/2
29	Eshlinger Road	E/1/5	Cosumnes River Riparian corridor	E/3/1	Pasture, riparian habitat 120 yards wide, containing predominantly willow and cottonwood trees with several large oaks.
30	Cosumnes River Riparian corridor	E/3/1	South of Laguna Creek	E/4/5	Riparian, riverine, grassland—Predominantly Cosumnes River Preserve land (CDFG parcels). Riparian habitat is approximately 120 yards wide, predominantly willow and cottonwood trees with several large oak trees. Also, small riparian corridor along Badger Creek.
31	South of Laguna Creek	E/4/5	Twin Cities Road	E/6/4	Riverine, cropland— Numerous sloughs (irrigation ditches).
32	Twin Cities Road	E/6/4	Robson Road Tower 34/2	E/7/4	Pasture, riparian, riverine—Riparian corridor for Deadman's Gulch
33	Robson Road Tower 34/2	E/7/4	Orr Road Tower 35/2	E/8/6	Orchard/vineyard—There is a sign to the north stating that this area is part of the Cosumnes River Preserve.
34	Orr Road Tower 35/2	E/8/6	New Hope Road	E/10/3	Orchard/vineyard, cropland, pasture—Scattered irrigation ditches
35	New Hope Road	E/10/3	Kost Road Tower 36/4	E/10/6	Grassland, pasture
36	Kost Road Tower 36/4	E/10/6	Peltier Road Tower 40/1	E/13/4	Riparian, riverine, orchard/vineyard, pasture—Riparian corridors associated with Mokelumne River and Dry Creek

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	Road Crossing or Other Descriptive Point	Segment/ MP mile/MP 0.1 mile ¹	Road Crossing or Other Descriptive Point	Segment/ MP mile/MP 0.1 mile ¹	
37	Peltier Road Tower 40/1	E/13/4	Immediately north of Thornton Road	E/17/5	Cropland, orchard/vineyard, pasture
38	Immediately north of Thornton Road	E/17/5	Eightmile Road Tower 49/4	E/23/3	Cropland, freshwater emergent wetlands—Wetlands are scattered.
39	Eightmile Road Tower 49/4	E/23/3	Brookside Road, north bank of San Joaquin River	E/29/0	Urban, riverine, freshwater emergent wetland, valley foothill riparian, cropland, annual grassland—Large graded area appears to be a future subdivision. Large riverine and riparian areas associated with Pixley Slough and Bear Creek. Croplands, mixed wetland, and grasslands north of slough.
40	Brookside Road at Buckley Cove	E/29/0	South bank of San Joaquin River	E/29/1	Riverine—Mostly rip rap adjacent to river; no substantial riparian corridor
41	South bank of the San Joaquin River	E/29/1	Tracy Substation	E/46/2	Cropland, riverine—The ROW does cross Middle River, Old River, and the Contra Costa Canal, but access was limited. As a result, we are uncertain whether these riverine crossings contain riparian corridors.

Source: Original

¹ E/29/1 refers to Segment E MP 29.1

approx: approximately

CDFG: California Department of Fish and Game

ROW: right-of-way



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Sacramento Area Office
650 Capitol Mall, Suite 8-300
Sacramento, California 95814-4706

April 27, 2001

In Reply Refer To:
SWR-01-SA-5660:MEA

Loreen McMahon
Environmental Project Manager
Department of Energy
Western Area Power Administration
Sierra Nevada Region
114 Parkshore Dr.
Folsom, California 95630-4710

Dear Ms. McMahon:

This is in response to your letter of February 21, 2001 indicating interest by the Western Area Power Administration (Western) in beginning informal consultation with the National Marine Fisheries Service (NMFS) to address concerns regarding the Sacramento Area Voltage Support Project and Endangered Species Act (ESA) issues. We appreciate the opportunity to enter into early consultation with your agency on issues which may effect species of concern to us.

Available information indicates that the following federally-listed fish species of concern to the NMFS may occur within the proposed project area:

Sacramento River winter-run chinook salmon (*Oncorhynchus tshawytscha*) - endangered
Central Valley ESU spring-run chinook salmon (*Oncorhynchus tshawytscha*) - threatened
Central California Coast ESU steelhead (*Oncorhynchus mykiss*) - threatened
Central Valley ESU steelhead (*Oncorhynchus mykiss*) - threatened

Designated critical habitat for the above listed species also occurs within the proposed project area.

As with the ESA, Federal action agencies are mandated by the Magnuson-Stevens Fishery Conservation and Management Act (MSA) (section 305[b][2]) to consult with NMFS on all actions that may adversely affect designated Essential Fish Habitat (EFH). The NMFS must provide EFH Conservation Recommendations (section 305[b][4][A]) on the proposed Federal action. To the extent possible, we strive to combine the ESA and EFH consultation processes.



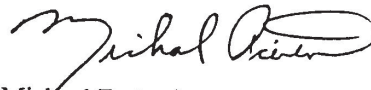
Our records indicate that the project area includes EFH designated for fish species managed under the MSA with the following Fishery Management Plans (FMP's):

Pacific Salmon Fishery Management Plan (Chinook Salmon (*Oncorhynchus tshawytscha*))
Pacific Groundfish Fishery Management Plan (Starry Flounder (*Platichthys stellatus*))
Coastal Pelagics Fishery Management Plan (Northern Anchovy, (*Engraulis mordax*))

Any biological assessment prepared for ESA compliance should also include an EFH assessment for the species managed by the above FMPs. Complete species lists and information on EFH and the Fishery Management Plans can be found on our website (<http://swr.ucsd.edu>).

If you have any questions regarding this response, please contact me at the letterhead address, or by telephone at (916) 930-3600 or FAX at (916) 930-3629.

Sincerely,



Michael E. Aceituno,
Supervisor, Sacramento Area Office

cc: NMFS-PRD, Long Beach, CA



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W2605
Sacramento, California 95825-1846

IN REPLY REF. TO:
1-1-02-123456789012



October 29, 2001

Ms. Nancy Werdel
Environmental Manager
Department of Energy
Western Area Power Administration
Sierra Nevada Customer Service Region
114 Parkshore Drive
Folsom, California 95630-4710

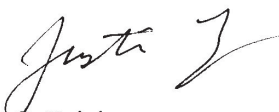
Subject: Species List for Informal Section 7 Consultation For The Proposed
Sacramento Area Voltage Support EIS Study Area, Reference FWS Letter
1-1-01-SP-0996 (this requests an updated list), Butte, Colusa, El Dorado,
Nevada, Placer, Sacramento, Sutter, Yolo, and Yuba Counties, California.

Dear Ms. Werdel:

We are sending the enclosed list in response to your October 23, 2001, request for information about endangered and threatened species (Enclosure A). The list covers the following U.S. Geological Survey 7½ minute quads of Holt, Union Island, Clifton Court Forebay, Lodi North, Thornton, Terminous, Elk Grove, Rio Linda, Sacramento East, Carmichael, Pleasant Grove, Nicolaus, Sutter Causeway, Verona, and Gilsizer Slough.

Please read *Important Information About Your Species List* (enclosed). It explains how we made the list and describes your responsibilities under the Endangered Species Act. Please contact Harry Mossman, Biological Technician, at (916) 414-6674, if you have any questions about the attached list or your responsibilities under the Endangered Species Act. For the fastest response to species list requests, address them to the attention of Mr. Mossman at this address. You may fax requests to him at 414-6712 or 6713.

Sincerely,


for Jan C. Knight
Chief, Endangered Species Division

Enclosures